In the Claims:

Kindly rewrite the claims as follows:

1. (Currently amended) A method of measuring ~~the~~ a QT interval of an electrocardiogram (ECG) signal wherein ~~the~~ an end of ~~the~~ a T wave is identified from ECG data, the end of the T wave being determined by reference to ~~the~~ timing of at least one intersection at which an upright T wave of a first set of derived ECG signal data intersects an inverted T wave of a second set of derived ECG signal data, the two sets of ECG data being superimposed so as to maximize ~~their~~ data fit over a segment of ~~the~~ ECG signal after a peak of the positive T wave ~~peak~~.

2. (Currently amended) ~~A~~ The method as claimed in claim 1 wherein the data fit ~~of said data~~ is maximised by a least squares calculation.

3. (Currently amended) ~~A~~ The method as claimed in claim 1 ~~or 2~~, wherein the method comprises the steps of:

(a) acquiring ECG signal data;

(b) deriving a first set of reduced noise ECG signal data from the acquired ECG signal data;

(c) inverting the first ~~reduced noise~~ set of reduced noise ECG signal data to derive an inverted set of reduced noise ECG signal data;

(d) identifying a portion of each set of ECG signal data corresponding to ~~a~~ said segment ~~after the T wave~~;

(e) calculating an offset such as to fit the first set of data to the inverted set of data over said segment;

(f) detecting at least one intersection between the first set of data and the inverted set of data by reference to said offset; and

(g) determining ~~the~~ an end of said QT ~~intervals~~ interval by reference to ~~the~~ timing of the detected intersection~~(s)~~.

4. (Currently amended) ~~A~~ The method as claimed in ~~claims~~ claim 3 wherein in step (g) the end of the QT interval is determined by ~~the~~ a first point intersection.

5. (Currently amended) ~~A~~ The method as claimed in ~~any previous~~ claim 4 wherein the end of the T wave is defined at the first point of intersection in said segment, provided there is at least one other point of intersection after a predetermined interval.

6. (Currently amended) ~~A~~ The method as claimed in ~~any previous~~ claim 1 wherein said interval can be varied according to ~~the~~ noise content in ~~the~~ a segment of ~~the~~ an ECG deemed to be ~~the~~ an isoelectric ~~line~~ baseline segment.

7. (Currently amended) ~~A~~ The method as claimed in ~~any of claims~~ claim 3 ~~to 6~~ wherein the step (b) comprises calculating ~~the~~ a median signal for each time from an ensemble of ECG signals for each lead to reduce low frequency baseline noise.

8. (Currently amended) ~~A~~ The method as claimed in ~~any of claims 3 to~~ claim 7 wherein the ~~method~~ step (b) further comprises smoothing the median ~~ensembled ECG~~ signal with a moving median filter to reduce high frequency noise.

9. (Currently amended) ~~A~~ The method as claimed in ~~any of claims 3 to~~ claim 8 wherein the ~~method~~ step (b) further comprises filtering the ~~median~~ smoothed~~,~~ median ~~ensembled ECG~~ signal using a wavelet frequency thresholding technique which substracts ~~the~~ magnitudes of any non-zero frequency components within the isoelectric baseline ~~segement~~ segment from ~~the~~ rest of the ECG thus further de-noising it.

10. (Currently amended) ~~A~~ The method as claimed in ~~any of claims 3 to~~ claim 9 wherein the step (b) further includes vertically shifting the smoothed median ~~ensembled ECG~~ signal so that ~~the~~ a minimum value after peak of T is zero.

11. (Currently amended) ~~A~~ The method as claimed in ~~any of claims 3 to~~ claim 10 wherein the step (b) further comprises ~~the steps of~~ detecting and correcting baseline drift in the first set of ECG data.

12. (Currently amended) ~~A~~ The method as claimed in ~~any preceding~~ claim 11 wherein the detecting ~~step~~ includes ~~the~~ testing for ~~the~~ presence of a single crossing of one isoelectric line.

13. (Currently amended) ~~A~~ The method as claimed in ~~any preceding~~ claim 12 wherein ~~the~~ an ensembled ECG ~~can be~~is rotated about a zero point or otherwise transformed to reconfigure the set of ECG data to have multiple crossings of said line.

14. (Currently amended) ~~A~~ The method as claimed in ~~any of claims~~ claim 3 ~~to 13~~ wherein the step (b) further includes applying a non-linear function such as squaring ~~the~~ amplitudes of the signal for all time instants, in order to accentuate features of interest and ensure positive deflections of the T wave.

15. (Currently amended) ~~A~~ The method as claimed in ~~any of claims 3 to~~ claim 14 wherein the step (b) further includes summing ~~the~~ squared amplitudes of ensembled orthogonal leads over all time instants to give a squared resultant vector ensembled ECG.

16. (Currently amended) ~~A~~ The method as claimed in ~~any preceding~~ claim 1 wherein the method further includes finding ~~the~~ a beginning of the QT interval by an established method~~, for example from the median of ensembled ECG signals from all 12 leads~~.

17. (Currently amended) ~~A~~ The method as claimed in ~~any preceding~~ claim 16 wherein the method includes calculating the QT interval by subtracting the beginning of the QT interval from the ~~calculated~~ end of the T wave.

18. (Currently amended) ~~A~~ The method as claimed in ~~any preceding~~ claim 1 wherein the QT interval is measured for ~~the~~ squared vector resultant data derived from quasi-orthogonal or actual orthogonal XYZ leads, and ~~the~~ a longest of QT measurements made in 3 dimensions is made.

19. (Currently amended) ~~A~~ The method as claimed in ~~any preceding~~ claim 3 wherein the ECG signal data ~~may be~~is acquired in step (a) from ~~the~~ a set of standard ECG leads including I, aVf and V2.

20. (Currently amended) An apparatus for measuring the QT interval of an electrocardiogram (ECG) signal ~~wherein there is provided~~ comprising means for identifying ~~the~~ an end of ~~the~~ a T wave from ECG data, the end of the T wave being defined as ~~the~~ a first time of intersection at which an upright T wave of a first set of derived ECG signal data intersects an inverted T wave of a second set of derived ECG signal data, the two sets of data being superimposed so as to maximise ~~their~~ data fit over a segment of the ECG signal after a peak of the positive T wave ~~peak~~.

21. (Currently amended) ~~An~~ The apparatus as claimed in claim 20 wherein the data fit ~~of said data~~ is maximised by a least squares calculation.

22. (Currently amended) ~~An~~ The apparatus as claimed in claim 20 ~~or 21~~ wherein the apparatus comprises:

means for acquiring ECG signal data;

means for deriving a first set of reduced noise ECG signal data from the acquired ECG signal data;

means for inverting the first set of reduced noise ~~set of~~ ECG signal data to derive an inverted set of reduced noise ECG signal data;

means for identifying a portion of each set of ECG signal data corresponding to ~~a~~ the segment ~~after the T wave~~;

means for calculating an offset such as to fit the first set of data to the inverted set of data over said segment;

means for detecting at least one intersection between the first set and the inverted set of data by reference to said offset; and

means for determining ~~the~~ an end of said QT ~~intervals~~ interval by reference to ~~the~~ timing of the detected intersection~~(s)~~.

23. (Currently amended) ~~An~~ The apparatus as claimed in claim 22 wherein in the means for determining the end of said QT interval, the QT interval is determined by ~~the~~ a first point of intersection.

24. (Currently amended) ~~An~~ The apparatus as claimed in ~~claims 22 or~~ claim 23 wherein the end of the T wave is defined at the first point of intersection in said segment, provided there is at least one other point of intersection after a predetermined interval.

25. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 22 ~~to 24~~ wherein said interval ~~can be~~is varied according to ~~the~~ noise content in ~~the~~ a segment of ~~the~~ an ECG deemed to be the isoelectric ~~line~~ baseline segment.

26. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 22 ~~to 24~~ wherein the means for deriving a first set of reduced noise ECG signal data comprises means for calculating ~~the~~ a median signal for each time from an ensemble of ECG signals for each lead to reduce low frequency baseline noise.

27. (Currently amended) ~~An~~ The apparatus as claimed ~~in any of claims 22 to~~ claim 26 wherein the means for deriving a first set of reduced noise ECG signal data further comprises means for smoothing the median ~~ensembled ECG~~ signal with a moving median filter to reduce high frequency noise.

28. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims 22 to~~ claim 27 wherein the means for deriving a first set of reduced noise ECG signal data further comprises means for filtering the ~~median~~ smoothed~~,~~ median ~~ensembled~~ signal ~~ECG~~ using a wavelet frequency thresholding technique which substracts ~~the~~ magnitudes of any non-zero frequency components within the isoelectric baseline ~~segement~~ segment from ~~the~~ a rest of the ECG thus further de-noising it.

29. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims 22 to 28~~ claim 27 wherein the means for deriving a first set of reduced noise ECG signal data further includes means for vertically shifting the smoothed median ~~ensembled ECG~~ signal so that ~~the~~ a minimum value after peak of T is zero.

30. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 22 ~~to 29~~ wherein the means for deriving a first set of reduced noise ECG signal data further comprises means for detecting and correcting baseline drift in the first set of ECG data.

31. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims 20 to~~ claim 30 wherein ~~detection~~ the means for detecting includes means for ~~the~~ testing for ~~the~~ presence of a single crossing of one isoelectric line.

32. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims 20 to~~ claim 31 ~~wherein there is provide~~ further comprising means for rotating ~~the~~ an ensembled ECG about a zero point or otherwise ~~transformed~~ transforming the ensembled ECG to reconfigure the set of ECG data to have multiple crossings of said line.

33. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 22 ~~to 32~~ wherein the means for deriving a first set of reduced noise ECG signal data further includes means for applying a non-linear function such as squaring ~~the~~ amplitudes of the signal for all time instants, in order to accentuate features of interest and ensure positive deflections of the T wave.

34. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 22 ~~to 33~~ wherein the means for deriving a first set of reduced noise ECG signal data further includes means for summing ~~the~~ squared amplitudes of ensembled orthogonal leads over all time instants to give a squared resultant vector ensembled ECG.

35. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 20 ~~to 34~~ wherein the apparatus further includes means for finding ~~the~~ a beginning of the QT interval by an established method~~, for example from the median of ensembled ECG signals from all 12 leads~~.

36. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims 20 to~~ claim 35 wherein the apparatus includes means for calculating the QT interval by subtracting the beginning of the QT interval from the ~~calculated~~ end of the T wave.

37. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 20 ~~to 36~~ wherein the QT interval is measured for ~~the~~ squared vector resultant data derived from quasi-orthogonal or actual orthogonal XYZ leads, and ~~the~~ a longest of QT measurements made in 3 dimensions is made.

38. (Currently amended) ~~An~~ The apparatus as claimed in ~~any of claims~~ claim 20 ~~to 35~~ wherein the ECG signal data is acquired from ~~the~~ a set of standard ECG leads including I, aVf and V2.

39. (Currently amended) A record carrier ~~wherein are~~ comprising recorded program instructions for causing a programmable processor to perform the steps of the method as claimed in ~~claims~~ claim 1 ~~to 19, or to implement an apparatus having the features claimed in any of claims 20 to 38~~.

40. (New) A record carrier comprising recorded program instructions for causing a programmable processor to implement an apparatus having the features claimed in claim 20.